

A3

9. (Amended) The method according to claim 21, wherein said surface of the covering layer is etched by means of reactive ion etching method, or polished by chemical mechanical polishing method.

10. (Amended) The method according to claim 21, wherein said surface of the covering layer is wet-etched by making use of one selected from the group consisting of water, an acidic aqueous solution, and an alkaline aqueous solution.

A4

12. (Amended) The method according to claim 22, wherein said covering film contains one selected from the group consisting of silicon, Al, and Ti.

A5

16. (Amended) The method according to claim 22, which further comprises heating the covering layer.

A6

19. (Amended) The method according to claim 22, wherein said surface of the covering layer is wet-etched by making use of one selected from the group consisting of water, an acidic aqueous solution, and an alkaline aqueous solution.

A7

21. (New) A method of forming a pattern, comprising:
forming a lower resist film over a surface of a substrate;
forming an upper resist film over a surface of the substrate;
patterning the upper resist film to form an upper resist pattern;
forming a covering layer containing silicon or a metal on the upper resist pattern by a coating method using a solution containing water as a solvent which is incapable of dissolving said upper resist pattern;

etching or polishing a surface of the covering layer until a surface of the upper resist pattern is exposed, thereby allowing the covering layer to selectively remain in an open portion of the upper resist pattern; and

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

etching the upper resist pattern and the lower resist film to form a lower resist pattern, using the covering layer remaining in the open portion as a mask.

22. (New) A method of forming a pattern, comprising:

forming a lower resist film over a surface of a substrate;

forming an upper resist film over a surface of the substrate;

patterning the upper resist film to form an upper resist pattern;

forming a covering layer containing silicon or a metal on the upper resist pattern by a coating method using a solution containing water as a solvent which is incapable of dissolving said upper resist pattern;

wet-etching a surface of the covering layer until a surface of the upper resist pattern is exposed, thereby allowing the covering layer to selectively remain in an open portion of the upper resist pattern; and

etching the upper resist pattern and the lower resist film to form a lower resist pattern, using the covering layer remaining in the open portion as a mask,

wherein said forming of said covering layer and said wet-etching are continuously performed using an apparatus provided with a coater and a wet etcher.

23. (New) A method of manufacturing a semiconductor device, comprising:

forming a lower resist film over a surface of a substrate;

forming an upper resist film over a surface of the substrate;

patterning the upper resist film to form an upper resist pattern;

forming a covering layer containing silicon or a metal on the upper resist pattern by a coating method using a solution containing water as a solvent which is incapable of dissolving said upper resist pattern;

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com